



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,803	12/29/2003	Ajay G. Gupta	884.A47US1	5339

21186 7590 10/24/2006

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

THIER, MICHAEL

ART UNIT PAPER NUMBER

2617

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/749,803	Applicant(s) GUPTA ET AL.	
	Examiner Michael T. Thier	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 4/15/2004 has been entered and considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (US 2002/0072391).

Regarding claims 1, 9, 15 and 23. Itoh teaches a system (figure 1) comprising a wireless base-station (figure 1 item 9-1) and a user device (figure 1 item 10). The user device connected to the wireless base station (see figure 1, the dotted line between 20-1 and 9-1), and the device comprising: a plurality of network adapters (see figure 1 items 20-1, 20-2, 20-3, and 20-4); a sensing driver adapted to sense an operational state of at least two of the plurality of network adapters (see par. 13, i.e. "...determining whether all the communication adapters configured in the system are available or not..."); a policy manager adapted to receive state information from the sensing driver and to selectively activate at least one of the plurality of network adapters based on the state information and a hierarchy of preferred network adapters (see par. 13, i.e.

“...enabling the communication adapter specified by the user if it is determined that the communication adapter specified by the user is available”, also see par. 15 for the hierarchy, or “priorities”, for setting the adapters to be enabled/disabled), the policy manager being adapted to selectively hold others of the plurality of network adapters based on the state information and a hierarchy of preferred network adapters in a reduced power state (par. 13, i.e. “...disabling, among communication adapters determined to be available, communication adapters other than the enabled communication adapter...”, also see par. 15 for the hierarchy, or “priorities”, for setting the adapters to be enabled/disabled); and a battery adapted to provide power to at least the plurality of network adapters (see par. 8 and 21, where he explains that the notebook PC has need for power savings, and that by selectively enabling/disabling the adaptors, wasting power could be eliminated. He does not explicitly disclose the power supply being a battery, but it is explained that the device can be a notebook computer, which it would have been obvious to one of ordinary skill in the art at the time of invention that a notebook PC could be powered by a battery source).

Regarding claim 2. Itoh further teaches, wherein the policy manager is adapted to selectively hold at least one of a non-selected group of the plurality of wireless network adapters in a reduced power state, and wherein the non-selected group does not include an activated one of the plurality of wireless network adapters. (see par. 21)

Regarding claim 3. Itoh further teaches, wherein the policy manager is adapted to store a hierarchy of preferred wireless network adapters. (see par. 15)

Regarding claim 4. Itoh further teaches, wherein the policy manager is further adapted to selectively activate at least one of the plurality of wireless network adapters based on the hierarchy of preferred wireless network adapters. (see par. 15)

Regarding claim 5. Itoh further teaches, wherein the policy manager is adapted to be programmed by a user to establish the hierarchy of preferred wireless network adapters. (see par. 13, i.e. "...specified by a user..." and par. 15)

Regarding claim 6. Although Itoh does not distinctly disclose the idea wherein the plurality of wireless network adapters include at least one wireless network interface card adapted to operate according to an IEEE 802.11x standard, the examiner notes that using a wireless card that operates according to one of the IEEE 802.11x standards would have been obvious to one of ordinary skill in the art at the time of invention, since these standards are well known and widely used in the US. (i.e. 802.11a,b and g)

Regarding claim 7. Although Itoh does not distinctly disclose the idea wherein the plurality of wireless network adapters include at least one wireless network interface card adapted to operate according to general packet radio service standard (GPRS), the examiner notes that using a wireless card that operates according to the GPRS standard would have been obvious to one of ordinary skill in the art at the time of invention, since this standard is well known and widely used in the US.

Regarding claim 8. Itoh further teaches, wherein the sense driver is adapted to continuously sense the operational state of each of the plurality of wireless network adapters. (see par. 13)

Regarding claim 10. Itoh further teaches, wherein the policy manager is adapted to conserve power in the battery by deactivation of the non-selected ones of the plurality of network adapters. (see par. 11, and 21)

Regarding claim 11. Itoh further teaches the idea of the system comprising a host (figure 1 item 5) and a user input/output interface (see par. 42, i.e. "...expansion slot..."). It would have been obvious to one of ordinary skill in the art to power these components using the battery of the notebook PC.

Regarding claim 12. Itoh further teaches wherein the battery provides power to run the sensing driver and the policy manager where he explains that the system can be a notebook PC (par. 10). It would have been obvious to one of ordinary skill in the art at the time of invention to power a notebook PC with a battery to allow for portability.

Regarding claim 13. Itoh further teaches wherein the plurality of network adapters includes at least one wireless network adapter (figure 1 item 20-1 and par. 13 and 43, i.e. "communication adapter 20-1 is a wireless card...").

Regarding claim 14. Itoh further teaches, wherein the selected one of the plurality of network adapters is continuously powered by the battery to maintain a connection with a base-station. (par. 13, and 21, the power supply is stopped for disabled adapters, and left to supply enabled adapters to allow communication, par. 72 explains the adapter communicates with an external entity (i.e. a base station))

Regarding claims 16 and 26. Itoh further teaches, wherein storing the hierarchy includes programming a network connection priority and a number of preferred available network adapters. (see par. 15)

Regarding claims 17 and 27. Itoh further teaches, wherein storing a hierarchy of network adapters includes storing at least one wireless network adapter in the hierarchy (see par. 15), wherein activating the preferred network adapter includes attempting to connect the wireless network adapter to a wireless base-station of a wired network (see par. 15, i.e. "...a given communication adapter among said stored number of communication adapters is enabled...", enabling the adapter reads on attempting to connect to a wireless base station, since the adapter can be wireless. Par. 72 explains the adapter communicates with an external entity (i.e. a base station))

Regarding claims 18 and 28. Itoh further teaches, wherein sensing available wireless network adapters includes continuously sensing for newly available wireless network adapters. (see par. 16, i.e. "...attachment/detachment of a LAN card...")

Regarding claims 19 and 29. Itoh further teaches, wherein activating a preferred available, network adapter includes deactivating a less preferred network adapter if a more preferred network adapter is sensed to be available. (see par. 13 and 15)

Regarding claims 20 and 30. Although Itoh does not distinctly disclose wherein sensing available network adapters includes continuously sensing whether the connection between the network adapter and the base-station is dropped, the examiner notes that this feature is inherent with wireless adapters in notebook PCs. Even if it were argued that this feature is not inherent, it is an obvious feature to one of ordinary skill in the art, to allow the user to know whether or not a connection to the network is available.

Regarding claims 21-22 and 31. Itoh further teaches the idea wherein the activating of a preferred available network adapter includes deactivating the preferred network adapter if the preferred network adapter is sensed to be unavailable and activating a next, less preferred network adapter. See par. 27-28 where it is explained that the system enables an adapter only if the adapter is available, and that the user can select another adapter to be enabled, and the previously enabled adapter will be disabled in order to enable the new adapter. The user clearly has the ability to activate a next adapter with a lower priority if the adapter enabled loses connection or is unavailable.

Regarding claim 24. Although Itoh does not distinctly disclose the idea wherein the plurality of wireless network adapters include at least one wireless network interface card adapted to operate according to an IEEE 802.11x standard, the GPRS standard, IEEE802.2, or IEEE802.3 standards, the examiner notes that using a wireless card that operates according to one of these standards would have been obvious to one of ordinary skill in the art at the time of invention, since these standards are well known and widely used in the US.

Regarding claim 25. Although Itoh does not distinctly disclose the idea wherein the plurality of wireless network adapters include a first network adapter to communicate by GPRS and a second to operate by an IEEE 802.11x standard, the examiner notes that using wireless cards that operate according to these standards would have been obvious to one of ordinary skill in the art at the time of invention, since

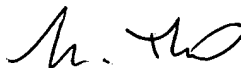
Art Unit: 2617

these standards are well known and widely used in the US. This would allow for the system to be diversified using 2 well-known communication standards.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael T. Thier whose telephone number is (571) 272-2832. The examiner can normally be reached on Monday thru Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Michael T Thier
Examiner
Art Unit 2617

10/11/2006


GEORGE ENG
SUPERVISORY PATENT EXAMINER